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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,489	11/28/2003	Noriyuki Unno	245672US90	9675

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EXAMINER

MANCUSO, HUEDUNG XUAN CAO

ART UNIT	PAPER NUMBER
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2821

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/722,489

Applicant(s)

UNNO ET AL.

Examiner

Huedung Cao Mancuso

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 26-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/22/04, 11/28/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This is a reply to the Applicants' response to the Restriction Requirement 1-25 is elected.

For convenience in review and for clarity of the record of the file, part of the Restriction Requirement is being provided herewith:

Election/Restrictions

2. This application contains claims directed to the following patentably distinct species of the claimed invention:

I. Claims 1-25, drawn to an outer mirror with build in antenna for an automobile, classified in class 343, subclass 712.

II. Claims 26-33, drawn to a surrounding monitoring are device constructed with an outer mirror, classified in class 348, subclass 148.

III. Claims 34-36, drawn to an automatic anti glare outer mirror, classified in class 359, subclass 604.

3. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims

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readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Response to Applicants' Election

4. Applicant's election of Invention Group I including claims 1-25, in the reply filed on 07/28/2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

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This application contains claims 26-36 are drawn to an invention nonelected in Paper No. 07/28/2006. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01. The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2-4, 9-12, 17-24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knapp et al. (US 6,861,942) in view of Matsuura et al. (US 6,808,277).

Regarding claim 1, Knapp discloses an outer mirror system for an automobile, comprising: a mirror base attached to the side of the automobile and extending outward from the side of the automobile see Knapp (suggested in figures 1 and 11); and a mirror housing suspended underneath the mirror base in which an antenna is installed (see Knapp, figure 11 and column 6, lines 13-24). As indicated above, Knapp suggests the mirror base in the figures, but does not explicitly state that one is used. However, since the mirror is attached to the body of the automobile there must be some structure connecting the two elements. Similarly, figure 11 appears to the mirror (202) hanging down from the attachment to the automobile though Knapp does not explicitly state this.

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Matsuura, in a similar system and environment, discloses a mirror (with an antenna) that is connected to the automobile with a support (base) (10 or 44 in the figures) and that the mirror and mirror housing (16 or 48 in the figures) are extending downward from the support (base). Therefore, to one of ordinary skill in the art it would have been obvious to combine the teachings of Knapp with Matsuura because Knapp appears to show this conventional type of structure for an external side-view mirror and Matsuura provides an example of this conventional structure. Further, both are for the use of an automobile mirror which has an antenna within it. Also, there is no disclosed criticality for having the mirror hanging down from the base as opposed to being supported from below by the base and the antenna system would function the same way.

Regarding claim 2, Knapp does not explicitly disclose that the mirror base has a fixing means that can fix the antenna unit and can adjust a fixing angle of the antenna unit therein, most anyone who has driven a car and adjusted the mirrors is well aware that it is standard to have means in the mirror to allow it to be adjusted and positioned to a given position (Official Notice; see MPEP 2144.03). Further, it is noted that Matsuura shows (in a similar type of car mirror) mechanism for adjusting and positioning a mirror see Knapp (figure 4 and column 4, lines 1-40). Therefore, to one of ordinary skill in the art, it would have been obvious to include the standard adjusting and positioning means in Knapp because of the conventionality of this and it would allow a driver to position the mirror to allow him to best see outside the car.

Regarding claims 3-4, Knapp discloses in figures 8-10B having electrical connectors between the antenna and the rest of the automobile.

Regarding claims 9-12, these claims claim that the mirror has a cover that is transmittable to radio waves. While the references do not explicitly state that the housing and body are a material that is transmittable to radio waves, they do state that the antenna is within the housing see (Knapp, column 6, lines 13-24). Therefore, it is at least obvious, if not inherent, that the housing for the antenna of Knapp be transmittable to the frequencies the antenna is designed to receive. If this were not the case, the antenna would not be able to properly function.

Regarding claims 17-20, the same reasoning as for claims 9-16 applies, except that these claims recite that the housing is made of "infrared light transmittable material". While the references do not state the use of infrared signals, this is a known and conventional type of communication wavelength (e.g., remote controls). Clearly, if the antenna were intended to receive infrared signals (such as remotely controlling the mirror position or for remote entry (as in figure 15 of Knapp), the housing would need to be made of a material that is transmittable to infrared (Official Notice; see MPEP 2144.03). The same reasons for obviousness as for claims 9-16 apply.

Regarding claim 21-24, while the references do not explicitly state that the inner (back) surface of the mirror is "frost-painted", it is extremely conventional and standard to coat the back side of a piece of glass to create a mirror (Official Notice; see MPEP 2144.03), commonly using metals like silver. Therefore, since it is standard to coat the back of a mirror to make a mirror, one of ordinary skill in the art would have done so to make a mirror.

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Regarding claim 25/1-24/4, 25/9-25/12, 25/17-25/24 , Knapp discloses that the mirrors are on both the driver and passenger sides of the car (24, 26).

7. Claims 5-8, 13-16, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knapp et al. (US 6,861,942) in view of Matsuura et al. (US 6,808,277) and further in view of Mitarai (US 6,078,294).

Regarding claims 5-8, while the system of Knapp and Matsuura disclose the claimed mirror and antenna system, and it is used for certain wave bands, the references do not explicitly state that the antenna has the capability of receiving a plural radio wave bands. However, it is common to have antenna systems that can receive multiple bands. For example, Mitarai, which is also directed to an antenna in an externally mounted car mirror, discloses that the antenna system is capable of receiving plural wave bands see Mitatai (column 2, lines 6-58; various TV & GPS frequencies). To one of ordinary skill in the art, it would have been obvious to have the antenna system able to receive a plurality of wave bands as this increases the usefulness of the system and makes it more desirable to have. Also, it is well known to have systems be able to receive plural bands (like AM & FM).

Regarding claims 13-16, these claims claim that the mirror has a cover that is transmittable to radio waves. While the references do not explicitly state that the housing and body are a material that is transmittable to radio waves, they do state that the antenna is within the housing see (Knapp, column 6, lines 13-24). Therefore, it is at least obvious, if not inherent, that the housing for the antenna of Knapp be transmittable

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to the frequencies the antenna is designed to receive. If this were not the case, the antenna would not be able to properly function.

Regarding claim 25/5-25/8, 25/13-25/16, Knapp discloses that the mirrors are on both the driver and passenger sides of the car (24, 26).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fuerst et al. (US 6,697,024 B2) disclose an exterior mirror with antenna.

Kodama (US 6,690,329 B2) disclose a vehicle surroundings monitoring device.

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Inquiries

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huedung Mancuso whose telephone number is (571) 272-1939.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan, can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Huedung Mancuso
Patent Examiner

A handwritten signature in black ink, appearing to read "Huedung Mancuso", with a stylized flourish at the end.